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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,520	07/19/2000	Brad C. Hollander	18357-00610US	1131
20350	7590	02/27/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			MCKANE, ELIZABETH L.	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/619,520	HOLLANDER, BRAD C.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Leigh McKane	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-20, 22-28 and 30-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 11, 13-15, 17, 18, 22-24, 26-28, 31, 33-35, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) 5, 10, 12, 16, 19, 20, 25, 30, 32, 36, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

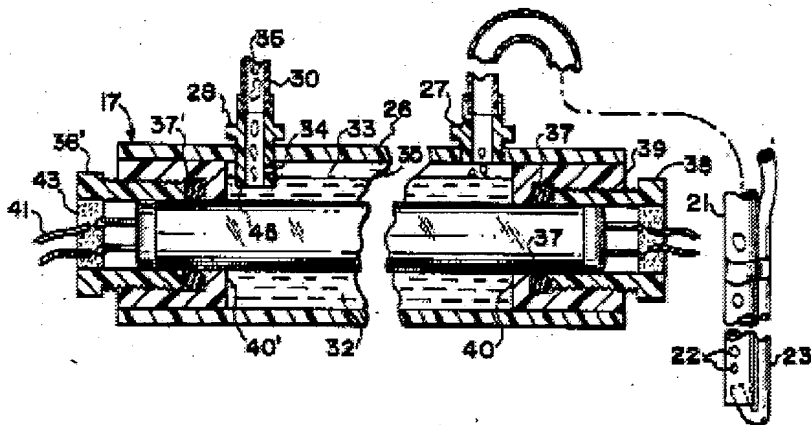
*Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 17, 18, 22, 31, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter, Jr. (U.S. Patent No. 3,640,391) in view of Peterson (U.S. Patent No. 4,968,489).

With respect to claims 1, 22, and 31, Carpenter, Jr. teaches a method and apparatus for pumping and sterilizing fluid wherein the apparatus includes a fluid conduit **32**, a UV lamp, and an air drive unit **22,23,25** coupled to the fluid conduit and causing the fluid to flow through the conduit and past the UV lamp. See col.2, lines 39-70.



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Carpenter, Jr. is silent as to whether the UV lamp has a protective sleeve. Peterson discloses that it is known in the art to house immersed UV quartz lamps in a protective, hermetic sleeve, such as an FEP sleeve (col.2, lines 15-31), in order to protect them from accumulating slime, deposits, and breakage. For these reasons, it would have been obvious to one of ordinary skill in the art to enclose the immersed lamp of Carpenter, Jr. in a protective FEP sleeve.

As to claims 17, 18, 37, and 38, the apparatus of Peterson includes the sleeve 160 and end caps 52 for sealing the tube. Although Peterson does not teach from what material the end caps are constructed, it would have been obvious to form them from the FEP material, in order to avoid slime accumulation thereon.

3. Claims 2-4, 6, 8, 11, 13-15, 23, 24, 26, 27, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter, Jr. in view of Peterson as applied to claims 1 and 22 above, and further in view of Block (Disinfection, Sterilization, and Preservation, 4<sup>th</sup> ed.).

With respect to claims 2-4, 8, 11, 23, 24, and 27 Carpenter, Jr. fails to teach the specifics of the UV light source. Block evidences that "the most practical method of generating UV radiation is by passage of electric discharge through low-pressure mercury vapor enclosed in special glass tubes... The principle of all germicidal lamps is the same, that of electron flow between electrodes through ionized mercury vapor." Page 555, "Germicidal Lamps." Thus, standard germicidal UV lamps by definition have a casing for holding a gas and a vaporizable material, and at least one electrode.

As to claims 6 and 26, Block teaches a glass casing and Peterson a quartz casing. As both are UV transmissive, it is deemed obvious to use either in the system of Carpenter, Jr..

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With respect to claim 13-15 and 33-35, the combination with Peterson discloses that the sleeve is applied in the form of a sleeve, or a strip that is wound onto the tube, or a dipped coating. See Peterson col.4, lines 4-8. However, it is deemed obvious to apply the sleeve in any other art recognized methods, such as heat shrinking and form pressing.

4. Claims 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter, Jr., Peterson, and Block as applied to claims 3 and 23 above, and further in view of Boyce.

The protective sleeve of the above combination is FEP. However, Boyce et al evidences coating a lamp with a silicone material which is moisture-impervious and prevents problems associated with the accumulation of water on the exterior surface of the lamp. See col.1, lines 24-70. As a silicone material would provide an alternative to FEP, it would have been an obvious substitution in the combination of Carpenter, Jr. with the secondary references.

#### ***Allowable Subject Matter***

5. Claims 5, 10, 12, 16, 19, 20, 25, 30, 32, 36, 39, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1275. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Leigh McKane**  
**Primary Examiner**  
**Art Unit 1744**

elm  
23 February 2004